



eltic-Plus⁺

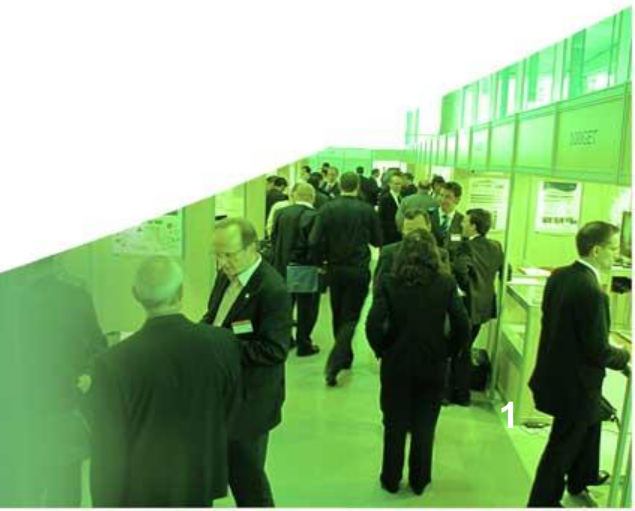
Smart Connected World



Celtic-Plus Event
28-29 April 2016, Stockholm

5G Test Network Finland

Sami Ruponen
sami.ruponen@vtt.fi



VISION

To enable Finland to provide the best and most appealing 5G test network environment and ecosystem in the world for research and business development.

MISSION

5G Test Network Finland coordinates the integration of the Finnish 5thGear programme testbeds and facilitates the cooperative creation of a joint open innovation platform for 5G technology and service development.

Versatile platform for 5G technology and service development

5G Radio Network

5G Core Network

Business and Regulation

Internet of Things

Network Functions Virtualization

Network Management

New Spectrum and Sharing
Methods

Quality of Service/Experience

Software Defined Networking



EU

5G PPP, HORIZON 2020,
CELTIC+

ASIA

NSFC-FINNISH ACADEMY,
SINO-FINLAND ALLIANCE

USA

WIFIUS

Research & Collaboration Offering

- State-of-the-art network infrastructure for 5G technology trials and demonstrations
- Flexible and evolving platform for 5G service development and testing
- Standardized interfaces for 3rd party equipment and service integration
- Extensive access to network and user monitoring data

5GTNF projects

- Finnish Tekes 5thGear programme projects
 - TAKE-5 (5G Core Network, SDN , NFV, UDN, C-RAN)
 - 5GTN (5G Radio network, air interface, network management)
 - CORE++ (Shared spectrum, business, regulation)
 - FUHF (Supplemental Downlink in 4G/5G, hybrid use of UHF)
 - Each have specific trialling environment
- 5GTNF will actively cooperate also with other parallel research and industry projects and test infrastructures.



5GTNF Partners



Anite

Bittium

Coriant

DIGITA

ELTEL

ERICSSON

EXFO

HUAWEI

intel

MEDIA TEK

NOKIA

Pulse Electronics

SONY

ECE
Digital Frequency

EFORE
ENERGY FOR ELECTRONICS

Fairspectrum

Haltian

indalgo

MAGISTER
SOLUTIONS

PehuTec
Innovation by commitment

RF
Part of aoxing group

RUGGED
TOOLING

SAROKAL
TEST SYSTEMS

A?
Aalto University

Centria
RESEARCH AND DEVELOPMENT

OAMK
OULU UNIVERSITY OF
APPLIED SCIENCES

TAMPERE
UNIVERSITY OF
TECHNOLOGY

TURKU AMK
TURKU UNIVERSITY OF
APPLIED SCIENCES

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

UNIVERSITY of OULU
OULUN YLIOPISTO

Turun yliopisto
University of Turku

VTT

Abo Akademi University

elisa

TeliaSonera OULU | BusinessOulu



Viestintävirasto
Finnish Communications
Regulatory Authority

yle

Contact Info

For more information and for interest to participate please contact:



Sami Ruponen (Presenter)
sami.ruponen@vtt.fi

Jarno Pinola (5GTNF coordinator)
jarno.pinola@vtt.fi

VTT Technical Research Centre of Finland Ltd

5gtnf.fi